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Listing of Claims

The following listing of claims will replace all prior versions, and listings, of claims in the subject application:

1. (currently amended) An image-processing method for a printing device which has a recording head in which a plurality of printing elements are provided and drives the printing elements based on multi-level image data to form an image on [[an]] a recording medium, comprising the steps of:

selecting a gamma correction parameter according to printing characteristics of the recording head; and

forming an image on the recording medium based on the selected gamma correction parameter.

2. (currently amended) A printing device which has a recording head in which a plurality of printing elements are provided and drives the printing elements based on multi-level image data to form an image on [[an]] a recording medium, comprising:

a selection unit selecting a gamma correction parameter according to printing characteristics of the recording head; and

an image forming unit forming an image on the recording medium based on the gamma correction parameter selected by the selection unit.

3. (currently amended) An image-processing method for a printing device which has a recording head in which a plurality of printing elements are provided and drives the printing

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elements based on multi-level image data to form an image on [[an]] a   recording medium,

comprising the steps of:

selecting a gamma correction parameter according to lightness characteristics of a printed

image of the recording head; and

forming an image on the recording medium based on the selected gamma correction

parameter.

4. (currently amended) A printing device which has a recording head in which a plurality

of printing elements are provided and drives the printing elements based on multi-level image

data to form an image on [[an]] a   recording medium, comprising:

a selection unit selecting a gamma correction parameter according to lightness

characteristics of a printed image of the recording head; and

an image forming unit forming an image on the recording medium based on the gamma

correction parameter selected by the selection unit.

5. (currently amended) An image-processing method for a printing device which has a

recording head in which a plurality of printing elements are provided and drives the printing

elements based on multi-level image data to form an image on   [[an]] a   recording medium,

comprising the steps of:

selecting a gamma correction parameter according to optical density characteristics of a

printed image of the recording head; and

forming an image on the recording medium based on the selected gamma correction

parameter.

6. (currently amended) A printing device which has a recording head in which a plurality of printing elements are provided and drives the printing elements based on multi-level image data to form an image on [[an]] a recording medium, comprising:

a selection unit selecting a gamma correction parameter according to optical density characteristics of a printed image of the recording head; and

an image forming unit forming an image on the recording medium based on the gamma correction parameter selected by the selection unit.

7. (currently amended) An image-processing method for an ink-jet printing device which has an ink-jet recording head in which a plurality of nozzles are provided and discharges ink drops from the plurality of nozzles based on multi-level image data to form an image on [[an]] a recording medium, comprising the steps of:

selecting a gamma correction parameter according to discharging characteristics of the ink-jet recording head; and

forming an image on the recording medium based on the selected gamma correction parameter.

8. (currently amended) An ink-jet printing device which has an ink-jet recording head in which a plurality of nozzles are provided and discharges ink drops from the plurality of nozzles based on multi-level image data to form an image on [[an]] a recording medium, comprising:

a selection unit selecting a gamma correction parameter according to discharging characteristics of the ink-jet recording head; and

an image forming unit forming an image on the recording medium based on the gamma correction parameter selected by the selection unit.

9. (original) The ink-jet printing device according to claim 8 wherein the discharging characteristics of the ink-jet recording head are characteristics of an ink drop volume to an input gradation level.

10. (original) The ink-jet printing device according to claim 8 wherein the discharging characteristics of the ink-jet recording head are characteristics of an ink drop velocity to an input gradation level.

11. (currently amended) An image-processing method for an ink-jet printing device which has an ink-jet recording head in which a plurality of nozzles are provided and discharges ink drops from the plurality of nozzles based on multi-level image data to form an image on [[an]] a recording medium, comprising the steps of:

selecting a gamma correction parameter according to lightness of a printed image of the ink-jet recording head; and

forming an image on the recording medium based on the selected gamma correction parameter.

12. (currently amended) An ink-jet printing device which has an ink-jet recording head in which a plurality of nozzles are provided and discharges ink drops from the plurality of nozzles based on multi-level image data to form an image on [[an]] a recording medium, comprising:

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a selection unit selecting a gamma correction parameter according to lightness of a printed image of the ink-jet recording head; and

an image forming unit forming an image on the recording medium based on the gamma correction parameter selected by the selection unit.

13. (original) The ink-jet printing device according to claim 12 wherein the gamma correction parameter is selected according to the lightness of the printed image to a plurality of gradation levels.

14. (original) The ink-jet printing device according to claim 12 wherein the gamma correction parameter is selected according to the lightness of the printed image to one gradation level.

15. (currently amended) An image-processing method for an ink-jet printing device which has an ink-jet recording head in which a plurality of nozzles are provided and discharges ink drops from the plurality of nozzles based on multi-level image data to form an image on [[an]] a recording medium, comprising the steps of:

selecting a gamma correction parameter according to an optical density of a printed image of the ink-jet recording head; and

forming an image on the recording medium based on the selected gamma correction parameter.

16. (currently amended) An ink-jet printing device which has an ink-jet recording head in

which a plurality of nozzles are provided and discharges ink drops from the plurality of nozzles

based on multi-level image data to form an image on [[an]] a recording medium, comprising:

a selection unit selecting a gamma correction parameter according to an optical density of

a printed image of the ink-jet recording head; and

an image forming unit an image on the recording medium based on the gamma correction

parameter selected by the selection unit.

17. (original) The ink-jet printing device according to claim 16 wherein the gamma

correction parameter is selected according to the optical density of the printed image to a

plurality of gradation levels.

18. (original) The ink-jet printing device according to claim 16 wherein the gamma

correction parameter is selected according to the optical density of the printed image to one

gradation level.

19. (currently amended) An ink-jet printing device which has a plurality of ink-jet

recording heads in which a plurality of nozzles are provided for each ink-jet recording head and

discharges ink drops of a plurality of colors from the plurality of nozzles of the plurality of ink-

jet recording heads respectively based on multi-level image data to form a color image on [[an]]

a recording medium, each ink-jet recording head comprising:

a selection unit selecting a gamma correction parameter of a corresponding color

according to discharging characteristics of the ink-jet recording head.

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Claims 20 and 21 (canceled).

22. (currently amended) The ink-jet printing device according to any of claims 8, 16 and 19 [[-21]] wherein the selected gamma correction parameter is displayed.

23. (currently amended) The ink-jet printing device according to ~~any of claims 19-21~~ claim 19, wherein the selected gamma correction parameters of the plurality of colors are displayed respectively.

24. (original) A printer driver of an ink-jet printing device which carries out the image-processing method according to any of claims 7, 11 and 15 wherein the image data is outputted to the ink-jet printing device according to the selected gamma correction parameter.

25. (original) The printer driver according to claim 24 wherein the printer driver comprises a unit setting the selected gamma correction parameter to the ink-jet printing device.

Claim 26 (canceled).

27. (currently amended) The ink-jet printing device according to any of claims 8, 12, 16 and 19 [[-21]] wherein the ink-jet printing device comprises a unit storing a plurality of gamma correction parameters, and one of the plurality of the gamma correction parameters is selected.

28. (currently amended) The ink-jet printing device according to ~~any of claims 19-21~~

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claim 19, wherein the ink-jet printing device comprises a unit storing a plurality of gamma correction parameters of the plurality of colors, and one of the plurality of the gamma correction parameters is selected.

29. (currently amended) The ink-jet printing device according to ~~any of claims 19-21~~ claim 19, wherein the gamma correction parameters are selected such that a difference in lightness between different printed images of the plurality of ink-jet recording heads for a same color is less than ±10.

30. (currently amended) The ink-jet printing device according to ~~any of claims 19-21~~ claim 19, wherein the ink-jet printing device comprises a unit storing the selected gamma correction parameters for the respective colors, and values of the selected gamma correction parameters for at least two colors are different.

31. (original) The ink-jet printing device according to claim 30 wherein the ink-jet printing device comprises a unit setting a kind of the selected gamma correction parameter of each ink-jet recording head to the ink-jet printing device.

Claims 32 and 33 (canceled).

34. (original) The image-processing method according to claim 1 or 3 wherein the recording head in which the plurality of printing elements are provided is a thermal recording head, the gamma correction parameter is selected according to gradation printing characteristics

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of the thermal recording head, and the image is formed on the recording medium based on the selected gamma correction parameter.

35. (original) The printing device according to claim 2 or 4 wherein the recording head in which the plurality of the printing elements are provided is a thermal recording head, the selection unit selects the gamma correction parameter according to gradation printing characteristics of the thermal recording head, and the image forming unit forms the image on the recording medium based on the gamma correction parameter selected by the selection unit.